

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference DF0648113P	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/CN2006/001153	International filing date ( <i>day/month/year</i> ) 30 May 2006 (30.05.2006)	Priority date ( <i>day/month/year</i> ) 05 August 2005 (05.08.2005)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant HUAWEI TECHNOLOGIES CO., LTD.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	<p>This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"><input checked="" type="checkbox"/></td> <td style="width: 35%;">Box No. I</td> <td style="width: 50%;">Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 338 82 70	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 05 February 2008 (05.02.2008)</td> </tr> <tr> <td style="padding: 5px;">                     Authorized officer   <div style="text-align: center; font-size: 1.2em;">Nora Lindner</div> </td> </tr> </table> e-mail: pt02.pct@wipo.int	Date of issuance of this report 05 February 2008 (05.02.2008)	Authorized officer  <div style="text-align: center; font-size: 1.2em;">Nora Lindner</div>
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Authorized officer  <div style="text-align: center; font-size: 1.2em;">Nora Lindner</div>			

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To: 100083

SONG Zhiqiang MA Haiming  
DEQI INTELLECTUAL PROPERTY LAW  
CORPORATION

7/F, Xueyuan International Tower, No.1  
Zhichun Road, Haidian District, Beijing, 100083, P.R.China

# PCT

WRITTEN OPINION OF THE INTERNATIONAL  
SEARCHING AUTHORITY

(PCT Rule 43 *bis*.1)

Date of mailing

(day/month/year) 21 SEP 2006 (21.09.2006)

Applicant's or agent's file reference

DF0648113P

FOR FURTHER ACTION

see paragraph 2 below

International application No.

PCT/CN2006/001153

International filing date (day/month/year)

30 May 2006 (30.05.2006)

Priority date (day/month/year)

05 August 2005 (05.08.2005)

International Patent Classification (IPC) or both national classification and IPC

H04L12/24 (2006.01)i

Applicant

HUAWEI TECHNOLOGIES CO.,LTD ET-AL

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/CN

The State Intellectual Property Office, the  
P.R.China 6 Xitucheng Rd., Jimen Bridge,  
Haidian District, Beijing, China 100088  
Facsimile No. 86-10-62019451

Date of completion of this opinion

29 August 2006 (29.08.2006)

Authorized officer

Kejun

Telephone No. (86-10) 62084593

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/CN2006/001153

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper  
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed  
☐ filed together with the international application in electronic form  
☐ furnished subsequently to this Authority for the purposes of search

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/CN2006/001153

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement:**

Novelty (N)	Claims	1-12	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-12	NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims	NONE	NO

**2. Citations and explanations**

D1: CN1412985A (23.04.2003)  
D2: CN1553651A (08.12.2004)  
D3: WO2005013050A2 (10.02.2005)

**1. Novelty**

Claim 1 requests for a fast convergence method of point to point services, and claim 12 requests for a PE device used for fast convergence of point to point services. D1 discloses a method for determining at least one service route in MPLS network. D2 discloses a user facility double returning method based on multi-protocol label exchange. D3 discloses a method for implementing HaSP topology vpn. There are not the same technical proposals described in the above documents 1-3, so claims 1, 12 are novel compared with the prior art, and comply with the Article 33(2) PCT. And thus the corresponding dependent claims 2-11 have novelty under Article 33(2) PCT.

**2. Inventive step**

Claim 1 requests for a fast convergence method of point to point services, and D1 relates to a method for determining at least one service route in MPLS network, which discloses that (see in particular page 1 line 12-18): protection switch and fast route change are implemented by saving a backup path for protecting a main LSP to resist network fault, from which, it must detect whether LSP occurs a failure, i.e. detect the status of LSP to determine to switch or not. The only difference between the scheme of claim 1 and the disclosure of D1 is that it's implemented in PE CE double-attached to. However D2 describes a user facility double returning method based on multi-protocol label exchange, which discloses that (see page 1 line 15-22, fig 1): in the application of BGP/MPLS VPN, a CE device connects to two PEs at the same time. A skilled person considering D1 and D2 in combination would arrive at the subject-matter of claim 1 without exercising an inventive step. Therefore claim 1 does not involve an inventive step, and does not meet the criteria set out in Article 33(3) PCT.

Dependent claims 2-10 do not disclose any special technical features which the person skilled in the art would regard as more than a normal design option. The person skilled in the art would include these features in order to solve the problem posed. Therefore claims 2-10 do not meet the criteria set out in Article 33(3) PCT.

Claim 12 claims the responding PE of claim 1, so according to the same explanation, claim 12 does not involve an inventive step, and does not comply with Article 33(3) PCT.

3. Claims 1-12 have industrial applicability under Article 33(4) PCT, because the technology schemes claimed can be made or used in the industry.